C9550-8

Basic Market Survey of the

Poultry International

AUDIENCE

Geographic Analysis of:

- Poultry Production Volume; Expansion Expectations
- Feed Sources
- Health Problems; Control Practices
- Poultry Production Equiqment Used; Needing Most Improvement
- Egg and Poultry Processing
- Readers' Sources of Buying Information
- Other Information

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POULTRY INTERNATIONAL BASIC MARKET SURVEY

Purpose of Survey

The main purpose of this 1982 survey of the POULTRY INTERNATIONAL audience was to update the bulk of the market information collected in 1978, and to reflect the intervening major circulation growth in the Middle East and the rest of Asia, Africa, and Oceania.

SURVEY METHOD

Sample Design: Every nth name was computer-drawn from the January 1982 POULTRY INTERNATIONAL BPA qualified circulation list of Egg Producers, Broiler Producers, Turkey Producers, Pullet Growers, Flock Supervisors and Servicemen, Nutritionists and Veterinarians, Hatcherymen/Breeders, Importers of Hatching Eggs/Chicks; Feed Manufacturers, Dealers and Importers; Poultry Processors, Further Processors, Poultry Marketing Firms, Cold Stores, Chain Store Buyers, Importers of Dressed Poultry, Shell Egg Processors, Egg Products Manufacturers, and Egg Marketing Firms. The value of n was such as to cover these lists and provide some 1,500 names. The list was arranged in country number sequence during the nth name extraction.

Sample Size:

	Combined Areas	Europe	Middle East And Africa	Asia (Except Middle East) And Oceania
Number in mailing sample.....	1,500	512	403	585
Number of usable returns.....	968	318	278	372
Number of unusable returns (including second returns from same individual)	56	14	28	14
Number of returns.....	1,024	332	306	386
Percent response.....	68.3%	64.8%	75.9%	66.0%

Respondents replied without a tangible incentive, and furnished their own international airmail postage.

Questionnaire Design: The questionnaire - at the back of this report -- was designed mainly to obtain the information felt most needed by the POULTRY INTERNATIONAL staff. The order, arrangement, and wording of the questions were guided by generally accepted mail survey technique.

Mailing Procedure: Computer-printed control cards containing the survey sample names and other information were numbered consecutively. Each questionnaire mailed was also numbered to match the number assigned the recipient on the control card.

The first mailing went out on January 19, 1982. About a week later a post card reminder was sent to each person on the sample list.

A follow-up questionnaire was mailed on February 12th, to all non-respondents.

A third questionnaire (second follow-up) identical to those in the earlier mailings went out to second mailing non-respondents on March 10th.

Tabulation and Report Writing: The survey returns were computer-tabulated by Analytical Computer Service Inc., Chicago. The Watt Publishing Co. Research Section wrote this report.

POULTRY INTERNATIONAL Basic Market Survey

HIGHLIGHTS

1. At survey time - around February 1982 - 74% of the poultry producers* each had a median average of about 25,000 layers - up from 19,600 earlier indicated for 1977. The percent of producers who raised broilers in 1981 grew from 42% earlier reported for 1977 to 46%, while the percent raising turkeys moved from 10% to 12%. The median number of broilers raised jumped from 75,000 to 127,000 per producer, while turkey production increased from a median average per producer of 16,800 to 22,600. (pages 8 - 11)

2. More of the egg producers have brown egg layers than have white egg layers. (page 12)

3. 33% of the poultry producers manufacture their own feed using individual ingredients - up from 31% earlier-reported for 1978, and 15% make their own feed from a pre-mix - up from 12%, while the percent buying complete feed dropped from 62% to 57%. Relatedly, there was growth in the percent who use feed mixing equipment - from 57% to 64%, and feed grinders - from 46% to 57%. 18% use a computer for feed formulation. (pages 16 - 17)

4. The percent of all producers citing one or more serious 1981 poultry health problems was 91% - ranging from 82% in Europe to 94% outside Europe. The health problem ranked "1" (most serious) by the largest percent of all the producers was CRD, Air Sac or PPLO, followed by Coccidiosis. Anticoccidial agents are used by 86% of all poultry producers; and antibiotics to treat or prevent poultry disease were used in 1981 by 84% of all producers. (pages 18 - 22)

*Defined at foot of page 8.

(MORE)

5. In answer to the question "Do you expect to build additional poultry housing in the next two years?" 65% of all the producers said "Yes," ranging from 42% in Europe to 81% in the Middle East and Africa. Among prospective builders, 16% expect to buy all their additional housing and equipment from one source (turn-key), and 81% expect to use two or more sources. (pages 33 - 34)

6. The percent of broiler producers who transport live broilers to the processing plant in plastic crates or coops jumped from the 53% earlier indicated for 1978 to 68%. (page 35)

7. There was growth in the percent of poultry meat processors who use (1) feather picking machinery - from 52% earlier reported for 1978 to 60%, (2) refrigeration equipment - from 50% to 63%, and (3) freezing equipment - from 47% to 62%; with the largest potential present and future growth in Asia and Oceania. (page 41)

8. Of 11 listed sources of information that readers use in 1982 in deciding to buy any particular animal health product, chick or poult, or equipment, magazines were cited most often in the Combined Areas for chicks or poults, and equipment, and second most often for poultry health products - exerting their greatest buying influence in the Middle East and Africa and Asia and Oceania. (page 45)

POULTRY INTERNATIONAL BASIC MARKET SURVEY

DETAILED FINDINGS

1. READERS'* POULTRY BUSINESS ACTIVITIES

	Combined Areas	Europe	Middle East And Africa**	Asia (Except Middle East) And Oceania
Respondents..	946	311	274	361
Percent of readers reporting:				
Producer of table eggs (for eating).....	48%	35%	59%	51%
Producer of started pullets (for use by others)...	16%	17%	22%	11%
Layer breeder or layer hatching egg producer.....	21%	19%	23%	20%
(Any of above).....	(60%)	(47%)	(72%)	(62%)
Producer of broilers (for eating).....	38%	29%	50%	38%
Broiler breeder or broiler hatching egg producer..	23%	21%	28%	21%
Producer of turkeys (for eating).....	8%	14%	12%	1%
Turkey breeder or turkey hatching egg producer....	4%	7%	4%	1%
Duck producer or breeder.....	3%	1%	4%	3%
(Any of above).....	(82%)	(73%)	(93%)	(81%)
Chick or poult hatcheryman.....	29%	37%	33%	28%
Feed manufacturer.....	28%	25%	28%	30%
Shell egg processor.....	3%	5%	3%	2%
Poultry meat processor.....	12%	14%	12%	10%
Other.....	14%	19%	8%	15%
TOTAL.....	247%	243%	286%	231%

*"Readers" refers to that portion of the January 1982 Poultry International BPA qualified circulation list classified as Egg Producers; Broiler Producers, Turkey Producers and Pullet Growers; Flock Supervisors and Servicemen; Veterinarians and Nutritionists; Hatcherymen/Breeders and Importers of Hatching Eggs/Chicks; Poultry Feed Manufacturers, Dealers and Importers; Poultry Processors, Further Processors, Poultry Marketing Firms, Cold Stores, Chain Store Buyers, and Importers of Dressed Poultry; and Shell Egg Processors, Egg Products Manufacturers and Egg Marketing Firms. The number in this circulation was 13,499; and the approximate geographic break-out was: Europe - 4,738; Middle East and Africa - 3,469; and Asia (except Middle East) and Oceania - 5,292.

**For purposes of this survey, the region of the Middle East and Africa comprises the 17 Asian countries of Afghanistan, Bahrain, Cyprus, Iran, Iraq, Israel, Jordan, Kuwait, Lebanon, Oman, Pakistan, Qatar, Saudi Arabia, Syria, United Arab Emirates, Turkey, and Yemen, plus all of Africa (of which Algeria, Egypt, Libya, Morocco, Sudan, and Tunisia are considered as part of the Middle East).

2. "Do you share your copy of Poultry International with anyone else?"

	Combined Areas	Europe	Middle East And Africa	Asia (Except Middle East) And Oceania
Respondents..	928	298	271	359
Percent of subscriber readers answering "Yes".....	62%	43%	70%	71%
(a) "If 'yes,' about how many others share your copy of Poultry International?"				
Respondents..	534	114	182	238
Among subscriber readers who share their copy of Poultry International, percent who share it with . . .				
10 or more other people.....	10%	2%	12%	13%
5 - 9 other people.....	24%	18%	24%	25%
3 or 4 other people.....	34%	40%	31%	34%
1 or 2 other people.....	32%	40%	33%	28%
Among subscriber readers who share their copy of Poultry International, average number of pass-along readers per copy.....	4.7	3.8	4.9	5.1
Among all subscriber readers, average number of pass-along readers per copy.....	2.9	1.6	3.4	3.6

3. "If you have a poultry hatchery, how many hatching eggs can your incubator(s) hold at one time?"

	Combined Areas	Europe	Middle East And Africa	Asia (Except Middle East) And Oceania
Respondents..	274	80	91	100
Percent of hatcherymen reporting:				
500,000 or more hatching eggs.....	27%	46%	17%	20%
200,000 - 499,999 hatching eggs.....	21%	19%	22%	22%
50,000 - 199,999 hatching eggs.....	25%	19%	26%	28%
Under 50,000 hatching eggs.....	27%	16%	35%	30%
Average hatching egg capacity, per hatcheryman....	464,000	527,600	282,000	417,000

4. TYPE(S) OF POULTRY PRODUCED

	Combined Areas	Europe	Middle East And Africa	Asia (Except Middle East) And Oceania
Respondents..	667	198	227	242
Percent of producers* reporting:				
Now have laying hens (table egg or layer or broiler breeder) or laying pullets.....	74%	64%	78%	78%
Raised pullet chicks in 1981.....	43%	35%	51%	43%
Raised broilers in 1981.....	46%	40%	53%	45%
Raised turkeys in 1981.....	12%	20%	15%	2%
Raised ducks in 1981.....	4%	2%	5%	4%

*"Producers" refers to readers who raise or keep poultry. Producers in the study issue numbered approximately as follows: Combined Areas - 11,069; Europe - 3,486; Middle East and Africa - 3,254; and Asia (except Middle East) and Oceania - 4,329.

5. POULTRY PRODUCTION VOLUME

Number Of LAYING Hens And/Or LAYING Pullets On The Place At Survey Time

	Combined Areas	Europe	Middle East And Africa	Asia (Except Middle East) And Oceania
Respondents..	542	138	184	220
Among producers who have layers, percent having:				
100,000 or more layers.....	21%	33%	17%	17%
25,000 - 99,999 layers.....	29%	34%	33%	21%
10,000 - 24,999 layers.....	28%	23%	22%	36%
Under 10,000 layers.....	22%	10%	28%	26%
Average layer inventory, per producer having any...	100,000	176,350	87,950	62,450

5. Total Number Of PULLET CHICKS Raised In 1981

	Combined Areas	Europe	Middle East And Africa	Asia (Except Middle East) And Oceania
Respondents..	321	80	127	114
Among producers who raised pullet chicks, percent raising:				
100,000 or more pullet chicks...	29%	56%	24%	16%
25,000 - 99,999 pullet chicks...	24%	26%	28%	17%
10,000 - 24,999 pullet chicks...	25%	12%	27%	33%
Under 10,000 pullet chicks.....	22%	6%	21%	34%
Average number of pullet chicks raised, per producer raising any.....	212,330	527,600	140,930	70,650

5. Total Number Of BROILERS Raised In 1981

Respondents..	300	73	121	106
Among producers who raised broilers, percent raising:				
1,000,000 or more broilers.....	19%	34%	16%	12%
100,000 - 999,999 broilers.....	32%	45%	27%	29%
25,000 - 99,999 broilers.....	17%	8%	17%	24%
Under 25,000 broilers.....	32%	13%	40%	35%
Average number of broilers raised, per producer raising any.....	1,503,000	2,733,000	1,353,000	884,400

5. Total Number Of TURKEYS Raised In 1981

	Combined Areas	Europe	Middle East And Africa	Asia (Except Middle East) And Oceania
Respondents..	64	33	29	2*
Among producers raising turkeys, percent raising:				
200,000 or more turkeys.....	20%	31%	10%	-
25,000 - 199,999 turkeys.....	27%	27%	24%	50%
5,000 - 24,999 turkeys.....	25%	24%	24%	50%
Under 5,000 turkeys.....	28%	18%	42%	-
Average number of turkeys raised, per producer raising any.....	173,200	283,800	58,000	17,500

5. Total Number Of DUCKS Raised In 1981

Respondents..	19**	1*	12**	6*
Among producers raising ducks, percent raising:				
20,000 or more ducks.....	21%	100%	25%	-
5,000 - 19,999 ducks.....	11%	-	8%	17%
Under 5,000 ducks.....	68%	-	67%	83%
Average number of ducks raised, per producer raising any.....	11,160	30,000	13,400	3,500

*Percentages and averages of this base are not projectable.
**Percentages and averages of this base should be viewed with more than usual caution.

6. "If you have any layers . . ."

(a) "Are they white egg layers, or brown egg layers?"

	Combined Areas	Europe	Middle East And Africa	Asia (Except Middle East) And Oceania
Respondents..	482	118	170	194
Among producers with layers, percent having:				
White egg layers only.....	32%	19%	23%	48%
Brown egg layers only.....	36%	48%	45%	20%
Both kinds of layers.....	32%	33%	32%	32%

(b) "About how many are . . ."

"White egg layers?"

Respondents..	265	51	79	135
Among producers with white egg layers, percent having:				
200,000 or more white egg layers....	11%	18%	13%	7%
25,000 - 199,999 white egg layers...	26%	33%	24%	25%
10,000 - 24,999 white egg layers....	29%	29%	26%	31%
Under 10,000 white egg layers.....	34%	20%	37%	37%
Average number of white egg layers, per producer having any.....	72,000	103,900	95,900	45,900

6(b). (cont.)

"Brown egg layers?"

	Combined Areas	Europe	Middle East And Africa	Asia (Except Middle East) And Oceania
Respondents..	281	84	113	84
Among producers with brown egg layers, percent having:				
200,000 or more brown egg layers.....	8%	17%	6%	1%
25,000 - 199,999 brown egg layers.....	27%	42%	26%	13%
10,000 - 24,999 brown egg layers.....	28%	26%	27%	30%
Under 10,000 brown egg layers.....	37%	15%	41%	56%
Average number of brown egg layers, per producer having any.....	100,400	256,700	43,000	21,400

7. "Which of the following traits in laying hens are most important to you?"

	Combined Areas	Europe	Middle East And Africa	Asia (Except Middle East) And Oceania
Respondents..	555	148	191	216
Among producers who have layers, or raise pullet chicks, percent reporting:				
Livability.....	60%	51%	60%	66%
Early maturity.....	19%	16%	22%	19%
Feed efficiency.....	73%	74%	66%	78%
Disease resistance..	61%	40%	73%	64%
Number of eggs.....	78%	79%	76%	79%
Egg size.....	39%	43%	38%	37%
Egg shell color.....	12%	18%	11%	9%
Shell strength.....	25%	39%	23%	18%
Egg yolk color.....	14%	15%	14%	13%
Interior egg quality.....	10%	16%	8%	8%
Carcass salvage value.....	8%	3%	13%	6%
Day old chick price.....	11%	7%	12%	12%

8. "Which of the following broiler traits are most important to you?"

	Combined Areas	Europe	Middle East And Africa	Asia (Except Middle East) And Oceania
Respondents..	507	151	177	179
Percent of broiler producers reporting:				
Parent breeder egg production.....	36%	42%	36%	30%
Parent breeder hatchability.....	34%	36%	33%	34%
Parent breeder livability.....	21%	23%	22%	20%
Broiler conformation.....	24%	24%	26%	22%
Broiler feather color.....	3%	3%	4%	3%
Self sexing.....	7%	6%	10%	3%
Broiler feed conversion.....	77%	77%	75%	78%
Broiler growth rate.....	64%	58%	66%	68%
Broiler livability.....	42%	40%	40%	46%
Disease resistance of broilers.....	55%	48%	61%	55%
Price of broiler chicks.....	20%	14%	22%	23%
Other.....	2%	1%	1%	3%

9. "Which of the following sources of poultry feed do you use?"

	Combined Areas	Europe	Middle East And Africa	Asia (Except Middle East) And Oceania
Respondents..	730	224	241	265
Percent of producers reporting:				
Manufacture my own feed using individual ingredients.....	33%	24%	26%	47%
Manufacture my own feed from a pre-mix.....	15%	11%	22%	12%
Blend commercial concentrate with my own grain...	14%	4%	23%	14%
Buy complete feed.....	57%	70%	61%	43%
Other.....	2%	4%	1%	2%

10. "Do you buy feed in bulk, or in bags?"

Respondents..	643	209	213	221
Percent of producers reporting:				
In bulk only.....	40%	70%	24%	28%
In bags only.....	38%	4%	58%	51%
Some in bulk, some in bags.	22%	26%	18%	21%

11. EQUIPMENT USED BY PRODUCERS TO PREPARE POULTRY FEED

	Combined Areas	Europe	Middle East And Africa	Asia (Except Middle East) And Oceania
Respondents..	507	144	163	200
Percent of producers reporting:				
Feed mixer	64%	44%	68%	74%
Feed grinder	57%	38%	64%	65%
Powered conveyor or auger	36%	53%	38%	23%
Bulk feed bins	49%	76%	41%	36%
Computer for feed formulation	18%	27%	9%	20%
Other	6%	2%	7%	8%

12. "Which of the following types of poultry feeding equipment do you use?"

Respondents..	663	205	231	227
Percent of producers reporting:				
Chain feeder	51%	72%	46%	36%
Transport hopper system	21%	33%	18%	14%
Pan system	38%	21%	48%	45%
Other, written in:				
Manual feeders, troughs	8%	-	10%	15%
Tube feeders	2%	-	3%	2%
Miscellaneous	8%	3%	4%	15%
Other, not specified	1%	2%	-	-

(a) "Do you use a system that controls (restricts) feed consumption?"

Respondents..	582	160	206	216
Percent of producers answering "Yes"	47%	48%	43%	50%

13. RANKING OF POULTRY HEALTH PROBLEMS IMPORTANT TO PRODUCERS IN 1981: COMBINED AREAS

Percent of (646 reporting) producers citing serious 1981 poultry health problems..... 91%

Poultry Health Problem	Percent Of (587 reporting) Producers Assigning A Rank Of . . .												
	1	2	3	4	5	6	7	8	9	10	11	12	Any Rank
Cholera.....	3%	4%	2%	1%	1%	1%	1%	*	1%	*	*	-	15%
Chronic Respiratory Disease (CRD, Air Sac or PPLO)	32%	17%	6%	2%	*	*	*	-	*	-	-	-	59%
Coccidiosis.....	18%	19%	7%	4%	2%	1%	*	*	-	-	*	-	52%
Coryza.....	7%	11%	5%	3%	2%	1%	1%	*	*	*	-	-	31%
Infectious Bronchitis.....	9%	9%	4%	2%	1%	1%	1%	1%	-	*	-	*	29%
Laryngotracheitis.....	1%	3%	1%	1%	*	1%	1%	*	*	*	*	-	10%
Leukosis.....	3%	6%	4%	2%	1%	1%	*	1%	*	*	-	-	19%
Marek's.....	9%	7%	4%	3%	3%	1%	*	*	*	*	-	-	29%
Newcastle (Fowl Pest).....	10%	8%	4%	2%	2%	1%	1%	*	-	-	*	-	29%
Ticks, Mites, Lice.....	2%	4%	2%	1%	2%	1%	*	1%	*	*	1%	-	15%
Worms.....	1%	7%	3%	3%	2%	2%	1%	*	*	1%	*	-	21%
Other.....	5%	3%	2%	1%	1%	*	*	*	*	*	*	*	15%

*Less than 0.5%.

13. RANKING OF POULTRY HEALTH PROBLEMS IMPORTANT TO PRODUCERS IN 1981: EUROPE

Percent of (187 reporting) producers citing serious 1981 poultry health problems..... 82%

Poultry Health Problems	Percent Of (154 reporting) Producers Assigning A Rank Of . . .												
	1	2	3	4	5	6	7	8	9	10	11	12	Any Rank
Cholera.....	2%	1%	1%	-	-	1%	1%	-	1%	1%	1%	-	9%
Chronic Respiratory Disease (CRD, Air Sac or PPLO).....	27%	15%	3%	2%	1%	-	1%	-	1%	-	-	-	50%
Coccidiosis.....	14%	20%	7%	2%	2%	1%	1%	1%	-	-	-	-	48%
Coryza.....	4%	2%	2%	1%	-	-	1%	1%	-	1%	-	-	12%
Infectious Bronchitis.....	20%	17%	5%	1%	-	1%	1%	-	-	-	-	-	45%
Laryngotracheitis.....	4%	5%	2%	2%	1%	1%	1%	-	-	-	-	-	16%
Leukosis.....	5%	7%	4%	1%	1%	1%	1%	1%	-	-	-	-	21%
Marek's.....	13%	8%	6%	3%	1%	1%	-	-	-	-	-	-	32%
Newcastle (Fowl Pest).....	1%	4%	2%	2%	1%	1%	1%	-	-	-	-	-	12%
Ticks, Mites, Lice.....	2%	2%	1%	-	2%	-	-	1%	1%	-	-	-	9%
Worms.....	1%	5%	1%	2%	1%	-	1%	1%	-	1%	1%	-	14%
Other.....	7%	4%	1%	1%	1%	-	1%	-	1%	-	1%	-	17%

13. RANKING OF POULTRY HEALTH PROBLEMS IMPORTANT TO PRODUCERS IN 1981: MIDDLE EAST AND AFRICA

Percent of (213 reporting) producers citing serious 1981 poultry health problems..... 94%

Poultry Health Problem	Percent Of (201 reporting) Producers Assigning A Rank Of . . .												
	1	2	3	4	5	6	7	8	9	10	11	12	Any Rank
Cholera.....	3%	4%	2%	1%	1%	1%	1%	-	1%	*	-	-	14%
Chronic Respiratory Disease (CRD, Air Sac or PPLO).....	26%	19%	9%	3%	*	-	1%	-	-	-	-	-	58%
Coccidiosis.....	21%	18%	7%	5%	3%	1%	-	-	-	-	*	-	55%
Coryza.....	6%	9%	5%	4%	2%	1%	1%	*	-	*	-	-	29%
Infectious Bronchitis.....	5%	5%	4%	2%	1%	2%	1%	2%	-	-	-	-	22%
Laryngotracheitis.....	1%	2%	-	1%	*	2%	1%	*	*	-	-	-	8%
Leukosis.....	3%	5%	4%	3%	2%	1%	1%	1%	*	-	-	-	20%
Marek's.....	7%	7%	1%	3%	3%	*	-	*	*	1%	-	-	23%
Newcastle (Fowl Pest).....	17%	9%	7%	3%	2%	2%	-	-	-	-	-	-	40%
Ticks, Mites, Lice.....	2%	4%	4%	1%	1%	1%	-	1%	-	*	2%	-	16%
Worms.....	2%	6%	4%	3%	3%	3%	1%	-	1%	1%	-	-	24%
Other.....	7%	2%	2%	1%	1%	-	-	*	-	*	-	1%	15%

*Less than 0.5%.

13. RANKING OF POULTRY HEALTH PROBLEMS IMPORTANT TO PRODUCERS IN 1981: ASIA (EXCEPT MIDDLE EAST) AND OCEANIA

Percent of (246 reporting) producers citing serious 1981 poultry health problems..... 94%

Poultry Health Problem	Percent Of (232 reporting) Producers Assigning A Rank Of . . .												
	1	2	3	4	5	6	7	8	9	10	11	12	Any Rank
Cholera.....	2%	4%	2%	2%	2%	1%	*	*	1%	*	-	-	15%
Chronic Respiratory Disease (CRD, Air Sac or PPLO).....	41%	15%	5%	*	*	*	-	-	*	-	-	-	63%
Coccidiosis.....	18%	18%	8%	6%	2%	1%	1%	*	-	-	-	-	54%
Coryza.....	9%	18%	7%	5%	3%	*	*	-	*	-	-	-	43%
Infectious Bronchitis.....	6%	7%	4%	2%	2%	*	1%	2%	-	*	-	*	25%
Laryngotracheitis.....	*	4%	2%	*	-	*	1%	-	1%	*	1%	-	11%
Leukosis.....	2%	6%	4%	3%	1%	*	-	2%	*	1%	-	-	20%
Marek's.....	7%	5%	4%	3%	4%	1%	1%	*	1%	*	-	-	27%
Newcastle (Fowl Pest).....	10%	9%	4%	1%	2%	1%	1%	*	-	-	*	-	29%
Ticks, Mites, Lice.....	1%	4%	2%	3%	2%	1%	1%	*	*	*	1%	-	16%
Worms.....	2%	7%	3%	4%	2%	4%	1%	-	-	1%	*	-	24%
Other.....	2%	3%	2%	1%	*	1%	-	-	-	-	-	-	9%

*Less than 0.5%.

14. "Do you use any anticoccidial agent(s) on your poultry?"

	Combined Areas	Europe	Middle East And Africa	Asia (Except Middle East) And Oceania
Respondents..	726	225	237	264
Percent of producers answering:				
Yes.....	86%	84%	88%	86%
No.....	14%	16%	12%	14%

15. "Did you use any antibiotics to prevent or treat poultry disease in 1981?

Respondents..	737	226	243	268
Percent of producers answering:				
Yes.....	84%	66%	93%	92%
No.....	16%	34%	7%	8%

16. "Against which of the following diseases do you have your poultry vaccinated?"

	Combined Areas	Europe	Middle East And Africa	Asia (Except Middle East) And Oceania
Respondents..	741	225	247	269
Percent of producers reporting:				
Avian Encephalomyelitis (AE) or Epidemic Tremor.....	28%	45%	18%	23%
Bronchitis.....	44%	68%	28%	38%
Cholera.....	11%	6%	15%	13%
Coryza.....	13%	1%	14%	23%
Fowl pox.....	56%	26%	65%	73%
Gumboro.....	38%	49%	39%	28%
Laryngotracheitis.....	12%	16%	9%	11%
Marek's.....	63%	66%	53%	71%
Newcastle.....	75%	56%	92%	76%
Other.....	6%	9%	6%	4%
(Any disease).....	(96%)	(89%)	(99%)	(98%)

17. "Who decides on the particular trademark(s) or manufacturer(s) of poultry vaccine(s) that you use, if any?"

	Combined Areas	Europe	Middle East And Africa	Asia (Except Middle East) And Oceania
Respondents..	694	208	232	254
Among producers who vaccinate their poultry, percent reporting:				
We do (the poultry producer).	40%	35%	36%	48%
Veterinarian.....	61%	60%	73%	52%
Chick or poult hatchery.....	12%	16%	4%	16%
Other.....	4%	3%	7%	2%

18. "Did you use any disinfectant for poultry farm clean-up in 1981?"

Respondents..	745	225	247	273
Percent of producers answering "Yes".....	93%	93%	96%	91%

(a) "If 'yes,' did you use a fogger for disinfecting?"

Among producers who used disinfectant for poultry farm clean-up, percent answering:				
Yes.....	41%	52%	33%	38%
No.....	59%	48%	67%	62%

19. "Do you use a high pressure washer?"

	Combined Areas	Europe	Middle East And Africa	Asia (Except Middle East) And Oceania
Respondents..	729	226	238	265
Percent of producers answering:				
Yes.....	68%	90%	61%	57%
No.....	32%	10%	39%	43%

20. FLY CONTROL PROGRAMS FOLLOWED BY PRODUCERS

Respondents..	674	191	223	260
Percent of producers reporting:				
Larvicide on the droppings.....	14%	13%	13%	16%
Surface spray on the walls.....	50%	50%	57%	43%
Fly bait in the alley ways.....	20%	8%	15%	32%
Misting in the air.....	12%	15%	13%	8%
Biological control.....	10%	8%	8%	13%
Other.....	4%	3%	5%	3%
Do not attempt to control.....	27%	32%	23%	28%

21. "Do you brood chicks?"

	Combined Areas	Europe	Middle East And Africa	Asia (Except Middle East) And Oceania
Respondents..	670	192	224	254
Percent of producers answering "Yes".....	84%	76%	88%	87%

(a) "If 'yes,' what energy source(s) do your chick brooders use?"

Respondents..	597	163	207	227
Among producers who brood chicks, percent reporting:				
Coal.....	7%	4%	10%	8%
Electricity....	52%	35%	47%	69%
Gas.....	49%	65%	55%	32%
Oil.....	22%	34%	27%	9%
Other.....	5%	2%	7%	4%

22. "If you have layers and/or raise pullets, how do you house them?"

LAYERS

	Combined Areas	Europe	Middle East And Africa	Asia (Except Middle East) And Oceania
Respondents..	527	132	184	211
Among producers who have layers, percent reporting:				
Cages or batteries.....	65%	74%	64%	61%
All slat or wire floors.....	8%	10%	3%	10%
Litter floor.....	35%	27%	45%	32%
Combination slat and litter floor...	15%	20%	10%	15%
Other.....	2%	3%	1%	1%

PULLETS

Respondents..	431	106	154	171
Among producers who raise pullets, percent reporting:				
Cages or batteries.....	33%	56%	21%	29%
All slat or wire floors.....	11%	10%	4%	18%
Litter floor.....	63%	55%	77%	56%
Combination slat and litter floor...	13%	19%	8%	15%
Other.....	1%	-	1%	1%

22. (cont.)

(a) "If you use cages or batteries, which type(s) do you have?"

LAYERS

	Combined Areas	Europe	Middle East And Africa	Asia (Except Middle East) And Oceania
Respondents..	352	103	119	130
Among producers who have layers in cages or batteries, percent reporting:				
Flat deck.....	26%	27%	24%	28%
Stair step (California style)...	47%	42%	46%	51%
Tier batteries.....	38%	58%	40%	20%
Compact.....	13%	24%	8%	8%
Other.....	2%	1%	3%	2%

PULLETS

Respondents..	155	55	39	61
Among producers who raise pullets in cages or batteries, percent reporting:				
Flat deck.....	41%	29%	31%	57%
Stair step (California style)...	25%	25%	23%	25%
Tier batteries.....	37%	58%	36%	18%
Compact.....	12%	20%	15%	3%
Other.....	4%	2%	8%	3%

23. TYPES OF POULTRY WATERING SYSTEMS USED

	Combined Areas	Europe	Middle East And Africa	Asia (Except Middle East) And Oceania
Respondents..	720	218	240	262
Percent of producers using:				
Automatic:				
Fountain.....	24%	32%	25%	18%
Cup.....	20%	23%	20%	16%
Nipple drinker....	30%	53%	29%	11%
Trough.....	24%	17%	22%	32%
Other.....	4%	5%	4%	3%
Manual:				
Fountain.....	12%	3%	15%	15%
Trough.....	28%	5%	31%	43%
Other.....	4%	1%	5%	5%

24. "What poultry house ventilation system(s) do you use?"

Respondents..	739	226	244	269
Percent of producers using:				
Open housing (natural ventilation) with fans....	37%	40%	36%	36%
Open housing without fans.....	52%	22%	63%	67%
Closed housing (with pressure-ventilation system and controlled environment).....	30%	68%	22%	5%
(Fans and/or closed housing).....	(60%)	(93%)	(52%)	(40%)

25. OTHER TYPES OF FARM EQUIPMENT USED

	Combined Areas	Europe	Middle East And Africa	Asia (Except Middle East) And Oceania
Respondents..	711	214	238	259
Percent of producers reporting:				
Operation alarm system.....	28%	56%	22%	12%
Stand-by electric generator.....	53%	58%	57%	44%
Manure purifying or oxidizing system.....	3%	3%	2%	3%
Air washer/cleaner.....	9%	9%	9%	8%
Heat recovery (recycling) system...	5%	9%	3%	2%
Farm tractor.....	52%	70%	59%	32%
Pick-up truck.....	49%	27%	61%	57%

26. "Which type(s) of poultry production equipment do you feel need the most improvement in design, construction, or performance?"

	Combined Areas	Europe	Middle East And Africa	Asia (Except Middle East) And Oceania
Respondents..	226	62	90	74
Percent of producers writing-in:				
Feeders	23%	21%	15%	36%
Waterers, Drinkers	18%	13%	22%	17%
Cages	11%	14%	13%	5%
Manure Handling Equipment	10%	10%	10%	12%
Ventilation Equipment	7%	6%	5%	9%
Egg Collection Equipment	6%	8%	7%	4%
Graders	1%	-	2%	1%
Housing	6%	3%	7%	8%
Cooling Equipment	6%	2%	9%	7%
Transport Equipment	5%	5%	7%	3%
Incubator	4%	3%	7%	1%
Hatcher	2%	2%	2%	1%
Nests	3%	8%	2%	1%
Heater	3%	8%	2%	1%
Brooding Equipment	3%	2%	2%	5%
Processing Equipment	2%	-	3%	1%
Air Washer/Cleaner	1%	2%	2%	-
Alarm System	1%	5%	-	-
Bulk Bins	1%	3%	-	-
Debeaker	1%	-	2%	-
Mixer	1%	-	2%	..
Miscellaneous (mentioned once each)	11%	8%	11%	15%

27. EQUIPMENT USED FOR POULTRY MANURE HANDLING

	Combined Areas	Europe	Middle East And Africa	Asia (Except Middle East) And Oceania
Respondents..	675	199	227	249
Percent of producers using:				
Conventional manure spreader	23%	49%	10%	14%
Front-end loader (tractor-mounted or self-propelled)	25%	48%	19%	12%
Liquid manure storage tank	7%	19%	4%	2%
Liquid manure tank type spreader	5%	13%	3%	2%
Manure agitator	2%	5%	*	1%
Manure drier	3%	4%	3%	4%
Manure pump	4%	7%	4%	3%
Bio-gas generating equipment	3%	1%	2%	6%
Mechanical pit cleaner	6%	9%	6%	4%
Tractor with side attachments	16%	17%	21%	11%
Shovel for manual removal	45%	14%	57%	59%
Other	6%	4%	6%	7%
None	7%	4%	9%	9%

*Less than 0.5%.

28. "Did you buy any commercial product to control rats in 1981?"

	Combined Areas	Europe	Middle East And Africa	Asia (Except Middle East) And Oceania
Respondents..	711	218	233	260
Percent of producers answering:				
Yes...	71%	77%	71%	66%
No....	29%	23%	29%	34%

29. "Do you expect to build additional poultry housing in the next two years?"

Respondents..	729	222	243	264
Percent of producers answering "Yes".....	65%	42%	81%	70%
"If 'yes,' . . ."				
(a) For what type(s) of poultry?"				
Respondents..	475	99	193	183
Among producers who answered "Yes," percent reporting:				
For layers.....	66%	52%	70%	69%
For pullet raising.....	25%	19%	32%	21%
For broilers.....	46%	29%	51%	50%
For turkeys.....	9%	16%	11%	3%
Other.....	11%	12%	11%	9%

29. (cont.)

(b) "Do you expect to buy all your additional housing and equipment from the same single source, or from more than one source?"

	Combined Areas	Europe	Middle East And Africa	Asia (Except Middle East) And Oceania
Respondents..	444	93	179	172
Among producers who expect to build additional poultry housing in the next two years, percent reporting:				
All from one source.....	16%	19%	18%	12%
From two or more sources...	81%	81%	77%	86%
Other.....	3%	-	5%	2%

30. "Have you had any complaints about flies, odors, or water pollution from anyone in the last two years?"

Respondents..	691	201	229	261
Percent of producers answering "Yes".....	35%	22%	40%	39%

31. "If you produce broilers, are the live broilers transported to the processing plant in plastic, or wooden, crates or coops?"

	Combined Areas	Europe	Middle East And Africa	Asia (Except Middle East) And Oceania
Respondents..	411	115	146	150
Percent of broiler producers reporting:				
Plastic only.....	54%	75%	61%	32%
Wooden only.....	18%	7%	17%	27%
Use both types.....	14%	8%	10%	23%
Metal.....	18%	19%	17%	19%
Other.....	6%	2%	7%	9%

32. "If you grade shell eggs . . .

(a) About how many eggs do you grade per week?"

	Combined Areas	Europe	Middle East And Africa	Asia (Except Middle East) And Oceania
Respondents..	225	61	63	101
Percent of shell egg graders reporting:				
500,000 or more eggs.....	18%	28%	14%	14%
100,000 - 499,999 eggs.....	30%	31%	38%	24%
25,000 - 99,999 eggs.....	29%	26%	24%	34%
Under 25,000 eggs.....	23%	15%	24%	28%
Average number of shell eggs graded per week, per shell egg grader.....	337,000	623,000	243,000	222,670

32. (cont.)

(b) "Do you have equipment to grade shell eggs?"

	Combined Areas	Europe	Middle East And Africa	Asia (Except Middle East) And Oceania
Respondents..	390	91	127	172
Percent of shell egg graders reporting:				
Yes....	51%	66%	47%	47%
No.....	49%	34%	53%	53%

"If 'yes,' . . ."

(1) "What is the total capacity per hour of your egg grader(s)?"

Respondents..	205	60	62	83
Among shell egg graders who have egg grading equipment, percent reporting:				
28,000 or more eggs....	11%	21%	8%	5%
14,000 - 27,999 eggs...	17%	22%	15%	16%
10,000 - 13,999 eggs...	8%	15%	3%	6%
4,000 - 9,999 eggs.....	25%	22%	29%	25%
Under 4,000 eggs.....	39%	20%	45%	48%

33. "Do you carton eggs?"

	Combined Areas	Europe	Middle East And Africa	Asia (Except Middle East) And Oceania
Respondents..	540	134	183	223
Percent of readers answering "Yes".....	38%	28%	53%	35%

"If 'yes,' . . ."

(a) "Are they cartoned by hand, or mechanically?"

Respondents..	221	38	100	83
Percent of egg cartoners reporting:				
By hand.....	86%	63%	94%	91%
Mechanically.....	14%	36%	6%	9%
Other.....	*	1%	-	-

*Less than 0.5%.

33. (cont.)

(b) "About how many eggs per week do you carton?"

	Combined Areas	Europe	Middle East And Africa	Asia (Except Middle East) And Oceania
Respondents..	287	63	125	99
Percent of egg cartoners reporting:				
200,000 or more eggs.....	27%	44%	22%	20%
50,000 - 199,999 eggs....	29%	32%	31%	25%
20,000 - 49,999 eggs.....	18%	6%	18%	26%
Under 20,000 eggs.....	26%	17%	29%	29%
Average number of eggs cartoned per week per cartoner.....	311,600	602,650	307,900	131,000

(c) "What type(s) of cartons do you use?"

Respondents..	221	39	99	83
Percent of egg cartoners reporting:				
Plastic.....	30%	31%	24%	35%
Paper.....	81%	82%	86%	73%
Other.....	7%	8%	7%	5%

33. (cont.)

(d) "How many eggs can each of your cartons hold?"

	Combined Areas	Europe	Middle East And Africa	Asia (Except Middle East) And Oceania
Respondents..	219	38	101	80
Percent of egg cartoners reporting:				
30 eggs.....	72%	67%	79%	67%
24 eggs.....	4%	1%	3%	5%
18 eggs.....	4%	7%	1%	4%
12 eggs.....	24%	30%	19%	26%
6 eggs.....	11%	31%	7%	4%
Other, written in:				
10 eggs.....	6%	18%	-	8%
Miscellaneous.....	5%	5%	4%	6%

(e) "Who decides on which company's egg cartons you will buy?"

Respondents..	199	33	92	74
Percent of egg cartoners reporting:				
We do (the egg cartoner).....	67%	58%	71%	69%
The egg buyer that we sell to.....	24%	40%	18%	18%
Other.....	9%	1%	11%	13%

34. TYPES OF EQUIPMENT USED IN READERS' POULTRY MEAT PROCESSING

	Combined Areas	Europe	Middle East And Africa	Asia (Except Middle East) And Oceania
Respondents..	221	59	77	85
Among readers who process poultry meat, percent reporting:				
Ice making machine.....	30%	49%	16%	29%
Eviscerating equipment.....	35%	64%	27%	21%
Feather picking machine.....	60%	81%	58%	46%
Refrigeration equipment.....	63%	86%	62%	48%
Freezing equipment.....	62%	81%	58%	51%
Further processing equipment.....	24%	51%	18%	9%
Poultry rendering (processing water purification) equipment....	22%	34%	22%	14%
None of above.....	20%	7%	18%	31%

35. TYPES OF POULTRY PROCESSED

	Combined Areas	Europe	Middle East And Africa	Asia (Except Middle East And Oceania
Respondents..	234	63	86	85
Percent of poultry processors reporting:				
Broilers.....	85%	83%	93%	79%
Turkeys.....	18%	44%	12%	4%
Culled layers.....	39%	27%	41%	47%
Other (roosters, ducks, geese, etc.).....	7%	11%	5%	7%

36. "If you process broilers . . ."

(a) "How many can you process per hour?"

Respondents..	128	38	46	44
Percent of broiler processors reporting:				
2,000 or more broilers.....	36%	63%	17%	32%
500 - 1,999 broilers.....	20%	24%	24%	14%
200 - 499 broilers.....	27%	13%	37%	27%
Under 200 broilers.....	17%	-	22%	27%
Average number of broilers processed per hour per broiler processor.....	1,900	3,080	1,200	1,670

36(b)(1) Percent Of Readers' Processed Broilers That Are Shipped WHOLE; Percent Shipped CUT UP

	Combined Areas	Europe	Middle East And Africa	Asia (Except Middle East And Oceania
Respondents..	106	33	42	31
Among broiler processors, weighted average percent of their processed broilers that are shipped . . .				
Whole.....	80%	90%	79%	64%
Cut-up.....	20%	10%	21%	36%

(b)(2) Percent Of Readers' Processed Broilers That Are Shipped FROZEN; Percent Shipped FRESH Chilled Or Ice Pack

Respondents..	92	32	34	26
Among broiler processors, weighted average percent of their processed broilers that are shipped . . .				
Frozen.....	61%	71%	45%	53%
Fresh chilled or ice pack.....	39%	29%	55%	47%

37. "If you process any poultry, do you make any FURTHER processed poultry meat products?"

	Combined Areas	Europe	Middle East And Africa	Asia (Except Middle East) And Oceania
Respondents..	184	52	62	70
Percent of poultry processors answering "Yes".....	32%	40%	29%	27%
(a) "If 'yes,' which one(s)?"				
Respondents..	69	24	24	21
Among makers of further processed poultry meat products, percent reporting:				
Fried chicken.....	42%	21%	58%	48%
Cooked chicken other than fried..	38%	25%	38%	52%
Turkey roll, boneless turkey.....	28%	54%	17%	10%
Ground poultry meat.....	25%	33%	21%	19%
Smoked poultry.....	16%	17%	17%	14%
Sausage products.....	35%	42%	25%	38%
Other.....	14%	17%	21%	5%

38. "To whom do you look for reliable information before you decide whether you will buy any particular animal health product, chick or poult, or equipment?"

	Combined Areas			Europe			Middle East And Africa			Asia (Except Middle East) And Oceania		
	Percent of readers reporting for . . .											
	Poultry Health Products	Chicks or Poults	Equip-ment	Poultry Health Products	Chicks or Poults	Equip-ment	Poultry Health Products	Chicks or Poults	Equip-ment	Poultry Health Products	Chicks or Poults	Equip-ment
Respondents..	703	563	610	201	145	177	226	194	204	276	224	229
Manufacturer's or breeding firm's salesman.....	22%	29%	30%	21%	26%	29%	21%	25%	34%	23%	34%	28%
Magazines.....	45%	34%	56%	41%	29%	52%	41%	37%	56%	50%	35%	59%
Other poultrymen.....	20%	26%	33%	22%	30%	44%	19%	26%	29%	18%	25%	28%
College or research station.....	27%	21%	12%	27%	26%	18%	28%	21%	10%	26%	19%	11%
Feed supplier.....	10%	7%	6%	10%	6%	6%	10%	6%	6%	9%	8%	7%
Serviceman.....	12%	8%	12%	11%	11%	12%	7%	6%	9%	16%	7%	16%
Chick or poult hatchery...	5%	21%	3%	5%	19%	3%	4%	22%	3%	5%	21%	3%
Health product supplier other than manufacturer.	16%	3%	3%	11%	3%	2%	15%	2%	2%	20%	4%	5%
Veterinarian.....	64%	23%	9%	64%	23%	8%	71%	24%	11%	58%	22%	8%
Personal trial results....	26%	34%	23%	16%	31%	18%	29%	37%	30%	30%	33%	21%
Trade fairs or exhibitions.....	11%	8%	33%	15%	11%	42%	12%	10%	36%	8%	4%	24%
Other.....	1%	2%	2%	1%	1%	1%	2%	3%	1%	1%	1%	3%
(Any of above).....	(98%)	(98%)	(99%)	(97%)	(97%)	(98%)	(99%)	(97%)	(98%)	(99%)	(99%)	(99%)

39. "Did you visit any poultry industry exhibitions (fairs) outside your country in 1981? (do not include fairs held in your own country)

	Combined Areas	Europe	Middle East And Africa	Asia (Except Middle East) And Oceania
Respondents..	847	274	255	318
Percent of readers answering "Yes".....	16%	27%	18%	6%
(a) "If 'yes,' which foreign poultry fairs?"				
Respondents..	124	69	40	15
Among readers who visited any poultry fairs outside their country in 1981, percent writing-in:				
Huhn & Schwein (Hannover).....	39%	45%	38%	13%
Salon (Paris).....	25%	35%	18%	-
Atlanta (Southeastern).....	19%	12%	28%	33%
"West Germany" (DLG).....	10%	12%	10%	7%
"Utrecht".....	8%	6%	13%	7%
BOCM - Silcock.....	6%	6%	8%	-
Fiera di Verona.....	6%	10%	-	-
Barcelona.....	2%	4%	-	-
"Italy".....	2%	1%	5%	-
"UK".....	2%	1%	5%	-
Forli.....	2%	3%	-	-
Miscellaneous (mentioned once each).....	26%	23%	15%	67%

40. "Do you regularly receive any FOREIGN poultry magazines other than Poultry International" (do not include magazines published in your own country)"

	Combined Areas	Europe	Middle East And Africa	Asia (Except Middle East) And Oceania
Respondents..	899	281	265	353
Percent of readers answering "Yes".....	39%	42%	43%	33%
(a) "If 'yes,' which foreign poultry magazine(s)"				
Respondents..	297	83	105	109
Among readers who receive foreign poultry magazines other than Poultry International, percent writing-in:				
World Poultry Industry.....	37%	34%	40%	37%
Poultry World.....	18%	19%	18%	16%
Poultry Science.....	12%	24%	11%	4%
Broiler Industry.....	10%	13%	6%	13%
Poultry Digest.....	9%	8%	10%	8%
Zootecnica International.....	8%	4%	11%	7%
Feed International.....	7%	2%	11%	6%
World Poultry Science.....	7%	6%	8%	6%
Poultry Tribune.....	6%	6%	5%	7%
Feedstuffs.....	5%	6%	6%	5%
Avian Diseases.....	4%	8%	5%	1%
British Poultry Science.....	3%	6%	4%	1%
Poultry Middle East.....	3%	-	8%	-
Avian Pathology.....	2%	5%	2%	-
L'Aviculteur.....	2%	5%	2%	-

(table continued on page 48)

40(a). (cont.)

	Combined Areas	Europe	Middle East And Africa	Asia (Except Middle East) And Oceania
Taiwan Magazine	2%	-	-	6%
Deutsche Geflugelwirtschaft	2%	6%	-	-
Turkey World	2%	6%	-	-
Pig International	1%	-	-	4%
Pluimveehouderj	1%	5%	-	-
Turkeys	1%	5%	-	-
Agribusiness	1%	-	3%	-
Courier Avicole	1%	2%	-	-
Feed Management	1%	-	2%	-
Modern Livestock	1%	-	-	2%
Poultry Abstracts	1%	-	2%	-
Poultry Guide	1%	-	-	2%
Poultry Times	1%	-	-	2%
Selecciones Avicolas	1%	2%	-	-
World Farming	1%	-	2%	-
Miscellaneous (mentioned once each)	23%	43%	17%	14%

41. "Regarding Poultry International, are the technical articles helpful to you in making management decisions?"

	Combined Areas	Europe	Middle East And Africa	Asia (Except Middle East) And Oceania
Respondents..	897	282	262	353
Percent of readers reporting:				
Often.....	41%	22%	50%	49%
Occasionally.....	55%	71%	47%	48%
Never.....	1%	2%	2%	1%
Not applicable.....	3%	5%	1%	2%

42. "How well does Poultry International cover the topics listed below?"

Breeding

Respondents..	857	261	257	339
Percent of readers reporting:				
Very Well.....	17%	14%	19%	19%
Adequately.....	28%	29%	27%	27%
Fairly Well.....	21%	15%	21%	25%
Poorly.....	4%	4%	6%	3%
No Comment.....	12%	13%	11%	12%

42. (cont.)

Chick or Poult Hatchery Management

	Combined Areas	Europe	Middle East And Africa	Asia (Except Middle East) And Oceania
Respondents..	857	261	257	339
Percent of readers reporting:				
Very Well.....	13%	11%	14%	14%
Adequately.....	29%	30%	21%	33%
Fairly Well.....	22%	15%	28%	23%
Poorly.....	5%	5%	8%	3%
No Comment.....	11%	13%	8%	12%

Nutrition

Respondents..	857	261	257	339
Percent of readers reporting:				
Very Well.....	16%	12%	19%	17%
Adequately.....	29%	30%	23%	32%
Fairly Well.....	27%	23%	27%	32%
Poorly.....	9%	11%	12%	6%
No Comment.....	7%	8%	6%	6%

42. (cont.)

Feeding

	Combined Areas	Europe	Middle East And Africa	Asia (Except Middle East) And Oceania
Respondents..	857	261	257	339
Percent of readers reporting:				
Very Well.....	18%	15%	23%	17%
Adequately.....	32%	34%	30%	34%
Fairly Well.....	26%	21%	24%	32%
Poorly.....	6%	7%	9%	3%
No Comment.....	5%	8%	4%	5%

Disease

	Combined Areas	Europe	Middle East And Africa	Asia (Except Middle East) And Oceania
Respondents..	857	261	257	339
Percent of readers reporting:				
Very Well.....	20%	16%	24%	19%
Adequately.....	31%	30%	29%	32%
Fairly Well.....	27%	25%	26%	29%
Poorly.....	8%	7%	11%	8%
No Comment.....	5%	8%	2%	4%

42. (cont.)

Housing

	Combined Areas	Europe	Middle East And Africa	Asia (Except Middle East) And Oceania
Respondents..	857	261	257	339
Percent of readers reporting:				
Very Well.....	23%	17%	26%	24%
Adequately.....	30%	33%	26%	30%
Fairly Well.....	23%	21%	24%	24%
Poorly.....	6%	6%	8%	6%
No Comment.....	5%	7%	4%	4%

Equipment

Respondents..	857	261	257	339
Percent of readers reporting:				
Very Well.....	32%	22%	44%	32%
Adequately.....	28%	34%	22%	29%
Fairly Well.....	19%	22%	16%	20%
Poorly.....	3%	3%	3%	4%
No Comment.....	5%	8%	3%	5%

42. (cont.)

Waste Disposal

	Combined Areas	Europe	Middle East And Africa	Asia (Except Middle East) And Oceania
Respondents..	857	261	257	339
Percent of readers reporting:				
Very Well.....	8%	5%	10%	9%
Adequately.....	18%	17%	14%	20%
Fairly Well.....	26%	22%	25%	29%
Poorly.....	10%	10%	14%	8%
No Comment.....	16%	18%	13%	16%

Poultry Processing

Respondents..	857	261	257	339
Percent of readers reporting:				
Very Well.....	17%	11%	21%	17%
Adequately.....	22%	21%	22%	24%
Fairly Well.....	22%	20%	22%	24%
Poorly.....	4%	5%	4%	4%
No Comment.....	13%	18%	10%	11%

42. (cont.)

Poultry Marketing

	Combined Areas	Europe	Middle East And Africa	Asia (Except Middle East) And Oceania
Respondents..	857	261	257	339
Percent of readers reporting:				
Very Well.....	18%	14%	24%	17%
Adequately.....	20%	18%	19%	21%
Fairly Well.....	19%	15%	19%	22%
Poorly.....	8%	7%	8%	9%
No Comment.....	15%	19%	12%	14%

Egg Processing

	Combined Areas	Europe	Middle East And Africa	Asia (Except Middle East) And Oceania
Respondents..	857	261	257	339
Percent of readers reporting:				
Very Well.....	12%	9%	13%	14%
Adequately.....	21%	20%	20%	23%
Fairly Well.....	19%	17%	18%	22%
Poorly.....	5%	5%	6%	6%
No Comment.....	18%	21%	18%	16%

42. (cont.)

Egg Marketing

	Combined Areas	Europe	Middle East And Africa	Asia (Except Middle East) And Oceania
Respondents..	857	261	257	339
Percent of readers reporting:				
Very Well.....	12%	8%	17%	12%
Adequately.....	20%	21%	18%	21%
Fairly Well.....	20%	16%	19%	24%
Poorly.....	7%	7%	7%	8%
No Comment.....	17%	20%	17%	16%

Business Management

Respondents..	857	261	257	339
Percent of readers reporting:				
Very Well.....	17%	12%	22%	16%
Adequately.....	20%	21%	18%	20%
Fairly Well.....	22%	18%	23%	24%
Poorly.....	13%	13%	11%	15%
No Comment.....	14%	16%	14%	12%

43. "Are you interested in reading about poultry industries outside your own country or region?"

	Combined Areas	Europe	Middle East And Africa	Asia (Except Middle East) And Oceania
Respondents..	889	283	255	351
Percent of readers answering "Yes".....	95%	91%	98%	96%

(a) "If 'yes,' in which of the following areas of the world outside of your own country are you most interested?"

Respondents..	871	266	262	343
Africa.....	25%	26%	36%	16%
North and/or Central America....	61%	54%	67%	60%
South America.....	22%	14%	26%	26%
Western Europe.....	61%	75%	64%	47%
Eastern Europe.....	21%	27%	22%	15%
Middle East.....	40%	38%	52%	33%
India and/or Pakistan.....	14%	9%	16%	16%
China.....	14%	10%	11%	20%
Other Far East (Japan, Philippines, and/or Indonesia)	26%	10%	21%	42%
USSR.....	14%	19%	13%	10%

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1. Please mark (✓) **each** of the following poultry business activities in which you or your firm are engaged.

(5)-1 ☐ Producer of table eggs (for eating)
2 ☐ Producer of started pullets (for use by others)
3 ☐ Layer breeder or layer hatching egg producer
4 ☐ Producer of broilers (for eating)
5 ☐ Broiler breeder or broiler hatching egg producer
6 ☐ Producer of turkeys (for eating)
7 ☐ Turkey breeder or turkey hatching egg producer
8 ☐ Duck producer or breeder
9 ☐ Chick or poult hatcheryman
0 ☐ Feed manufacturer

(6)-1 ☐ Shell egg processor
2 ☐ Poultry meat processor
3 ☐ Other (please specify) _____

2. Do you share your copy of Poultry International with anyone else? (7)-1 ☐ Yes 2 ☐ No
   (a) If "yes," about how many others share your copy of Poultry International? _____ (8-9) number

3. If you have a poultry hatchery, how many hatching eggs can your incubator(s) hold at one time? _____ (10-13) number of eggs
   If you or your company do **not** raise or keep any poultry, nor produce hatching eggs, please mark here ( ) (14), and skip to question 32.

4. Please mark each of the following that apply to you.

(15)-1 ☐ Now have laying hens (table egg or layer or broiler breeder) or laying pullets
2 ☐ Raised pullet chicks in 1981
3 ☐ Raised broilers in 1981
4 ☐ Raised turkeys in 1981
5 ☐ Raised ducks in 1981
6 ☐ None of the above

What is your approximate poultry production volume? (please answer only for the poultry type(s) you **do** have)

Total number of laying hens (table egg or layer or broiler breeder) and/or laying pullets on the place now ..... _____ (16-19) number

Total number of pullet chicks raised in 1981. .... _____ (17-20) number

Total number of broilers raised in 1981 ..... _____ (21-25) number

Total number of turkeys raised in 1981 ..... _____ (26-29) number

Total number of ducks raised in 1981 ..... _____ (30-33) number

you do **not** have any laying hens or laying pullets, nor raise pullet chicks, please skip to question 8.

6. If you have any layers . . .
   (a) Are they white egg layers, or brown egg layers? (please mark)

(34)-1 ☐ White egg layers only
2 ☐ Brown egg layers only
3 ☐ Have both kinds of layers

   (b) About how many are . . . white egg layers? _____ (35-39) number

brown egg layers? _____ (40-44) number

7. Which of the following traits in laying hens are most important to you? (please mark no more than four traits)

(45)-1 ☐ Livability
2 ☐ Early maturity
3 ☐ Feed efficiency
4 ☐ Disease resistance
5 ☐ Number of eggs
6 ☐ Egg size
7 ☐ Egg shell color
8 ☐ Shell strength
9 ☐ Egg yolk color
0 ☐ Interior egg quality
X ☐ Carcass salvage value
Y ☐ Day old chick price

8. Which of the following broiler traits are most important to you? (please mark no more than four traits)

(46)-1 ☐ Parent breeder egg production
2 ☐ Parent breeder hatchability
3 ☐ Parent breeder livability
4 ☐ Broiler conformation
5 ☐ Broiler feather color
6 ☐ Self sexing
7 ☐ Broiler feed conversion
8 ☐ Broiler growth rate
9 ☐ Broiler livability
0 ☐ Disease resistance of broilers
X ☐ Price of broiler chicks
Y ☐ Other (please specify) _____

9. Which of the following sources of poultry feed do you use? (please mark all that apply)

(47)-1 ☐ Manufacture my own feed using individual ingredients
2 ☐ Manufacture my own feed from a pre-mix
3 ☐ Blend commercial concentrate with my own grain
4 ☐ Buy complete feed
5 ☐ Other (please specify) _____

10. Do you buy feed in bulk, or in bags? (please mark)

(48)-1 ☐ In bulk only
2 ☐ In bags only
3 ☐ Some in bulk, some in bags

11. Please mark the following types of equipment used in your poultry business to prepare feed.

(49)-1 ☐ Feed mixer
2 ☐ Feed grinder
3 ☐ Powered conveyor or auger
4 ☐ Bulk feed bins
5 ☐ Computer for feed formulation
6 ☐ Other (please specify) _____

12. Which of the following types of poultry feeding equipment do you use? (please mark)

(50)-1 ☐ Chain feeder
2 ☐ Transport hopper system
3 ☐ Pan system
4 ☐ Other (please specify) _____

(a) Do you use a system that controls (restricts) feed consumption? (51)-1 ☐ Yes 2 ☐ No

13. Please rank your poultry health problems by writing in "1" at the left of your most serious problem below, "2" beside the second most serious, etc., for as many as were important to you in 1981.

(52-53) _____ Cholera
(54-55) _____ Chronic respiratory disease (CRD, Air Sac, or PPLO)
(56-57) _____ Coccidiosis
(58-59) _____ Coryza
(60-61) _____ Infectious bronchitis
(62-63) _____ Laryngotracheitis
(64-65) _____ Leukosis
(66-67) _____ Marek's
(68-69) _____ Newcastle (fowl pest)
(70-71) _____ Ticks, mites, lice
(72-73) _____ Worms
(74-75) _____ Other (please specify) _____
(76) ( ) None (80)-1

14. Do you use any anticoccidial agent(s) on your poultry?

(5)-1 ☐ Yes 2 ☐ No

15. Did you use any **antibiotics** to prevent or treat poultry disease in 1981? (6)-1 ☐ Yes 2 ☐ No

16. Against which of the following diseases do you have your poultry **vaccinated**? (please mark)

(7)-1 ☐ Avian Encephalomyelitis (AE) or Epidemic Tremor
2 ☐ Bronchitis
3 ☐ Cholera
4 ☐ Coryza
5 ☐ Fowl pox
6 ☐ Gumboro
7 ☐ Laryngotracheitis
8 ☐ Marek's
9 ☐ Newcastle
0 ☐ Other (please specify) _____
X ☐ None

17. Who decides on the particular trademark(s) or manufacturer(s) of poultry vaccine(s) that you use, if any? (please mark all that apply)

(8)-1 ☐ We do (the poultry producer)
2 ☐ Veterinarian
3 ☐ Chick or poult hatchery
4 ☐ Other (please specify) _____

18. Did you use any disinfectant for poultry farm clean-up in 1981? (9)-1 ☐ Yes 2 ☐ No

(a) If "yes," did you use a **fogger** for disinfecting?

(10)-1 ☐ Yes 2 ☐ No

19. Do you use a high pressure washer? (11)-1 ☐ Yes 2 ☐ No

20. Please mark the type(s) of fly control program you follow.

(12)-1 ☐ Larvicide on the droppings
2 ☐ Surface spray on the walls
3 ☐ Fly bait in the alley ways
4 ☐ Misting in the air
5 ☐ Biological control
6 ☐ Other (please specify) _____
7 ☐ Do not attempt to control

21. Do you brood chicks? (13)-1 ☐ Yes 2 ☐ No

(a) If "yes," what energy source(s) do your chick brooders use? (please mark)

(14)-1 ☐ Coal
2 ☐ Electricity
3 ☐ Gas
4 ☐ Oil
5 ☐ Other (please specify) _____

22. If you have layers and/or raise pullets, how do you house them? (please mark)

	Layers	Pullets
Cages or batteries	(15)-1 ☐	(16)-1 ☐
All slat or wire floors	2 ☐	2 ☐
Litter floor	3 ☐	3 ☐
Combination slat and litter floor	4 ☐	4 ☐
Other (please specify) _____	5 ☐	5 ☐

(a) If you use cages or batteries, which type(s) do you have? (please mark)

	Layers	Pullets
Flat deck	(17)-1 ☐	(18)-1 ☐
Stair step (California style)	2 ☐	2 ☐
Tier batteries	3 ☐	3 ☐
Compact	4 ☐	4 ☐
Other (please specify) _____	5 ☐	5 ☐

23. Please mark the type(s) of poultry watering system(s) you use.

Automatic:	Manual:
(19)-1 ☐ Fountain	(20)-1 ☐ Fountain
2 ☐ Cup	2 ☐ Trough
3 ☐ Nipple Drinker	3 ☐ Other
4 ☐ Trough	
5 ☐ Other	

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24. What poultry house ventilation system(s) do you use? (please mark)
(21)-1 ☐ Open housing (natural ventilation) with fans
2 ☐ Open housing without fans
3 ☐ Closed housing (with pressure-ventilation system and controlled environment)

25. Please mark each of the following other types of farm equipment that you use.
(22)-1 ☐ Operation alarm system
2 ☐ Closed circuit television survey system
3 ☐ Stand-by electric generator
4 ☐ Manure purifying or oxidizing system
5 ☐ Air washer/cleaner
6 ☐ Heat recovery (recycling) system
7 ☐ Farm tractor
8 ☐ Pick-up truck
9 ☐ None of above

26. Which type(s) of poultry production equipment do you feel need the most improvement in design, construction, or performance?
_____

27. Please mark the following equipment you use for poultry manure handling.
(23)-1 ☐ Conventional manure spreader
2 ☐ Front-end loader (tractor-mounted or self-propelled)
3 ☐ Liquid manure storage tank
4 ☐ Liquid manure tank type spreader
5 ☐ Manure agitator
6 ☐ Manure drier
7 ☐ Manure pump
8 ☐ Bio-gas generating equipment
9 ☐ Mechanical pit cleaner
(24)-1 ☐ Tractor with side attachments
2 ☐ Shovel for manual removal
3 ☐ Other (please specify) _____
4 ☐ None

28. Did you buy any commercial product to control **rats** in 1981?
(25)-1 ☐ Yes 2 ☐ No

29. Do you expect to build additional poultry housing in the next two years? (26)-1 ☐ Yes 2 ☐ No

If "yes" . . .
(a) For what type(s) of poultry? (please mark)
(27)-1 ☐ For layers
2 ☐ For pullet raising
3 ☐ For broilers
4 ☐ For turkeys
5 ☐ Other (please specify) _____

(b) Do you expect to buy **all** your additional **housing** and **equipment** from the same **single** source, or from more than one source? (please mark)
(28)-1 ☐ All from one source
☐ From two or more sources
☐ Other (please specify)
_____

30. Have you had any complaints about flies, odors, or water pollution from anyone in the last two years?
(29)-1 ☐ Yes 2 ☐ No

31. If you produce broilers, are the live broilers transported to the processing plant in **plastic,** or **wooden,** crates or coops? (please mark)
(30)-1 ☐ Plastic only
2 ☐ Wooden only
3 ☐ Use both types
4 ☐ Metal
5 ☐ Other (please specify)_____

32. If you grade shell eggs . . .
(a) About how many eggs do you grade per week?
(31)-(34) _____ Eggs (approx.)
(b) Do you have equipment to grade shell eggs?
(35)-1 ☐ Yes 2 ☐ No
(1) If "yes," what is the total capacity per hour of your egg grader(s)? (please mark)
(36)-1 ☐ Under 4,000 eggs
2 ☐ 4,000-9,999 eggs
3 ☐ 10,000-13,999 eggs
4 ☐ 14,000-27,999 eggs
5 ☐ 28,000 or more eggs

33. Do you carton eggs? (37)-1 ☐ Yes 2 ☐ No
If "yes" . . .
(a) Are they cartoned by hand, or mechanically? (please mark)
(38)-1 ☐ By hand
2 ☐ Mechanically
3 ☐ Other (please specify)_____
(b) About how many eggs per week do you carton?
(39)-(42) _____ Eggs (approx.)
(c) What type(s) of cartons do you use? (please mark)
(43)-1 ☐ Plastic
2 ☐ Paper
3 ☐ Other (please specify)_____
(d) How many eggs can **each** of your cartons hold? (please mark all that apply)
(44)-1 ☐ 30 eggs
2 ☐ 24 eggs
3 ☐ 18 eggs
4 ☐ 12 eggs
5 ☐ 6 eggs
6 ☐ Other (please specify)
_____
(e) Who decides on which **company's** egg cartons you will buy? (please mark)
(45)-1 ☐ We do (the egg cartoner)
2 ☐ The egg buyer that we sell to
3 ☐ Other (please specify)_____

If you do **not** process poultry meat, please skip to question 38.

34. Please mark each of the following types of equipment used in your poultry processing business.
(46)-1 ☐ Ice making machine
2 ☐ Eviscerating equipment
3 ☐ Feather picking machine
4 ☐ Refrigeration equipment
5 ☐ Freezing equipment
6 ☐ Further processing equipment
7 ☐ Poultry rendering (processing water purification) equipment
8 ☐ None of above

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35. If you process poultry, what type(s) do you process? (please mark)

(47)-1 ☐ Broilers
2 ☐ Turkeys
3 ☐ Culled layers
4 ☐ Other (roosters, ducks, geese, etc.)

36. If you process broilers . . .

(a) How many can you process per **hour**? _____ (approx.)
(48-50) Broilers

(b) What percent of your processed broilers are . . .

(1) Shipped **whole** (not cut into parts) (51-53) _____%
Shipped **cut up** (54-56) _____%
100%

(2) Shipped **frozen** (57-59) _____%
Shipped **fresh** chilled or ice pack (60-62) _____%
100%

37. If you process any poultry, do you make any **further** processed poultry meat products? (63)-1 ☐ Yes 2 ☐ No

(a) If "yes," which one(s)? (please mark)

(64)-1 ☐ Fried chicken
2 ☐ Cooked chicken other than fried
3 ☐ Turkey roll, boneless turkey
4 ☐ Ground poultry meat
5 ☐ Smoked poultry
6 ☐ Sausage products
7 ☐ Other (please specify)

_____

38. To whom do you look for reliable information before you decide whether you will buy any particular animal health product, chick or poult, or equipment? (please mark)

	Poultry Health Products	**Chicks or Poults**	**Equipment**	
	(65)	(67)	(69)	
Manufacturer's or breeding firm's salesman	☐	☐	☐	1
Magazines	☐	☐	☐	2
Other poultrymen	☐	☐	☐	3
College or research station	☐	☐	☐	4
Feed supplier	☐	☐	☐	5
Serviceman	☐	☐	☐	6
Chick or poult hatchery	☐	☐	☐	7
Health product supplier other than manufacturer	☐	☐	☐	8
Veterinarian	☐	☐	☐	9
Personal trial results	☐	☐	☐	0
Trade fairs or exhibitions	☐	☐	☐	X
Other (please specify) _____	☐	☐	☐	Y
None	☐ 1-(66)	☐ 1-(68)	☐ 1-(70)	

39. Did you visit any poultry industry exhibitions (fairs) **outside** your country in 1981? (do not include fairs held in your own country) (71)-1 ☐ Yes 2 ☐ No

(a) If "yes," which foreign poultry fairs?

_____
_____

40. Do you regularly receive any **foreign** poultry magazines other than Poultry International? (do not include magazines published in your own country) (72)-1 ☐ Yes 2 ☐ No

(a) If "yes," which foreign poultry magazine(s)?

_____
_____

41. Regarding Poultry International, are the technical articles helpful to you in making management decisions? (please mar

(73)-1 ☐ Often
2 ☐ Occasionally
3 ☐ Never
4 ☐ Not applicable
(80)-2

42. How well does Poultry International cover the topics listed below? (please mark)

	Very Well	Ade-quately	Fairly Well	Poorly	No Comm	
Breeding	☐	☐	☐	☐	☐	(5)
Chick or poult hatchery management	☐	☐	☐	☐	☐	(6)
Nutrition	☐	☐	☐	☐	☐	(7)
Feeding	☐	☐	☐	☐	☐	(8)
Disease	☐	☐	☐	☐	☐	(9)
Housing	☐	☐	☐	☐	☐	(0)
Equipment	☐	☐	☐	☐	☐	(1)
Waste disposal	☐	☐	☐	☐	☐	(12)
Poultry processing	☐	☐	☐	☐	☐	(13)
Poultry marketing	☐	☐	☐	☐	☐	(14)
Egg processing	☐	☐	☐	☐	☐	(15)
Egg marketing	☐	☐	☐	☐	☐	(16)
Business management	☐	☐	☐	☐	☐	(17)

43. Are you interested in reading about poultry industries outside your own country or region? (18)-1 ☐ Yes 2 ☐ No

(a) If "yes," in which of the following areas of the world outside of your own country are you most interested? (please mark)

(19)-1 ☐ Africa
2 ☐ North and/or Central America
3 ☐ South America
4 ☐ Western Europe
5 ☐ Eastern Europe
6 ☐ Middle East
7 ☐ India and/or Pakistan
8 ☐ China
9 ☐ Other Far East (Japan, Philippines, and/or Indonesia)
0 ☐ USSR
(80)-3

Thank you for returning this form promptly. We appreciate your interest in Poultry International, and I am sure this information will help us to make it even more valuable to you.

Terry Ramos, Editor

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